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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/696,620	10/29/2003	Johan Peter Dahlberg	DN2003073	5590	
27280 7	7280 7590 10/05/2005			EXAMINER	
	YEAR TIRE & RUBBE	FISCHER, JUSTIN R			
INTELLECTUAL PROPERTY DEPARTMENT 823 1144 EAST MARKET STREET AKRON, OH 44316-0001			ART UNIT	PAPER NUMBER	
			1733		

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)			
	10/696,620	DAHLBERG ET AL.			
Office Action Summary	Examiner	Art Unit			
	Justin R. Fischer	1733			
The MAILING DATE of this communication apprend for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	N. nety filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 21 Ju	ly 2005.				
2a)⊠ This action is FINAL . 2b)□ This					
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closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
 4) Claim(s) 2-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 					
7) Claim(s) is/are objected to.	alaction requirement				
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examiner	r.				
10) The drawing(s) filed on is/are: a) acce					
Applicant may not request that any objection to the o	• • • • • • • • • • • • • • • • • • • •	` '			
Replacement drawing sheet(s) including the correcti 11) The oath or declaration is objected to by the Ex-	, , , , ,	• •			
	animer. Note the attached Office	Adion of 101111 1 0 102.			
Priority under 35 U.S.C. § 119		41) 40			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
a) All b) Some * c) None of: 1. Certified copies of the priority documents	s have been received.				
2. Certified copies of the priority documents		on No			
3. Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage			
application from the International Bureau					
* See the attached detailed Office action for a list of	of the certified copies not receive	d.			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) ☐ Notice of Informal P	ate atent Application (PTO-152)			
Paper No(s)/Mail Date	6) Other:				

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tokutake (US 5,117,886, of record) and further in view of Sandstrom (US 6,230,773, of record). Tokutake and Sandstrom are applied in the same manner as set forth in the Non-Final rejection mailed on April 29, 2005.

Tokutake discloses a pneumatic tire construction having a carcass 10, a tread 3, and a belt reinforcing structure 25, wherein the axial distance between the bead heels increases upon inflation in order to provide improved vehicle turning performance/cornering power (Abstract and Column 2, Lines 55-65)- thus, the rim width is greater than the bead width of the vulcanized tire. The reference, however, is silent as to the inclusion of a runflat insert. In any event, it is extremely well known and conventional to include a sidewall insert in a wide variety of tires in order to provide increased rigidity in the sidewall and ultimately to provide a tire with the capability of operating in an underinflated condition, as shown for example by Sandstrom. It is emphasized that runflat inserts are extremely well known and extensively used in the tire industry. Thus, one of ordinary skill in the art at the time of the invention would have found it obvious to include said insert in the tire of Tokutake for the benefits detailed

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above. Lastly, it is noted that there is a reasonable expectation of success in obtaining the benefits of improved vehicle turning when modifying the tire of Tokutake to include a runflat insert.

It is noted that Tokutake expressly discloses the general concept of forming a bead width less than a rim width. Tokutake suggests that such a construction provides improved vehicle turning performance/cornering power. In describing the above noted axial distances (bead width and rim width), Tokutake suggests that the bead width is between 12.7 and 50.8 millimeters less than the rim width. It appears that such a construction provides a suitable griping force against the rim to maintain the tire seated on said rim- such a force would be expected in the tire of Tokutake in view of Sandstrom.

As to claims 2-7, Sandstrom evidence the common structure and arrangement of runflat inserts.

Response to Arguments

3. Applicant's arguments filed July 21, 2005 have been fully considered but they are not persuasive.

Applicant initially argues self-supporting inserts are not extensively used in the tire industry and while all major manufacturers have developed some variation, the industry has been slow to adopt this technology. It is evident, though, that the general concept of providing sidewall inserts to provide improved runflat capability was well known prior to the filing of the current application, as shown for example by Sandstrom. Thus, one of ordinary skill in the art at the time of the invention would have found it

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obvious to include such a component in the tire of Tokutake to provide improved runflat capability. It is further noted that the background of Sandstrom states, "Tire construction <u>have been</u> suggested for pneumatic tires which are designed to be run without internal pressure....For example, tires <u>have been</u> suggested which have special sidewall inserts designed to improve sidewall stiffness, thereby reducing, or inhibiting, the tire's tendency to go flat without internal air pressure." (Column 1, Lines 10-20).

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Applicant further contends that the tire of Tokutake relies on a decreased rigidity in the upper sidewall portion to achieve maximum cornering forces and improve the vehicle turning performance, which is contrary to the inclusion of a sidewall insert (argued that it increases rigidity in upper sidewall). However, Tokutake states, "in the tire according to the present invention, the rigidity of the inner sidewall portion is markedly increased as compared with that of the outer sidewall portion" (Column 7, Lines 34-40). Thus, it appears that the method of Tokutake requires a certain rigidity for the upper sidewall portion in relation to the lower sidewall portion. By including a runflat insert over the lower and upper sidewall portions, the absolute difference in rigidities would be maintained and the upper sidewall portion would be able to deform axially outward due to the radially outward dislocation of the inner sidewall portion.

Additionally, applicant contends that the concept of molding a bead base width equal to or less than a rim width is antithetical to conventional thought and practice.

While it is agreed that wheel assemblies are more commonly formed with larger bead base widths, as compared to the rim width, the primary teaching (Tokutake) in the above rejection expressly suggests an assembly in which the bead base width is in fact

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less than the associated rim width. In particular, the reference states that such a design contributes to the improvement in vehicle turning performance since such a design allows the inner sidewall to adequately deform in the axial direction (Column 2, Lines 55-65). Lastly, it appears that the stress applied to the inserts in the tire of Tokutake, in view of Sandstrom, would be equal to those experienced in the inventive wheel assembly.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Fischer

September 27, 2005

JEFF H. AFTERGUT PRIMARY EXAMINER GROUP 1300